



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	<del></del> -	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	AT LICATION NO.		TILING DATE	- FIRST NAMED INVENTOR	ATTORNET DOCKET NO.	CONFIRMATION NO.	
09/516,303			02/29/2000	Christopher Scott Gifford	PII-1100	1819	
	28584	7590	06/15/2005	•	EXAMINER		
			LLOCK LLP	FLANDERS, ANDREW C			
	SUITE 2200			<del></del>			
	353 SACRA	<b>MENTO</b>	STREET	ART UNIT	PAPER NUMBER		
	SAN FRANC	CISCO,	CA 94111	2644			
					DATE MAILED: 06/15/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Applicatio	n No.	Applicant(s)						
		09/516,30	3	GIFFORD ET AL.						
	Office Action Summary	Examiner		Art Unit						
		Andrew C.		2644						
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).										
Status										
1)🖾	)⊠ Responsive to communication(s) filed on <u>20 May 2005</u> .									
2a) <u></u> □	This action is FINAL. 2b) This action is non-final.									
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.										
Disposit	Disposition of Claims									
	<ul> <li>✓ Claim(s) 1-4,15-17 and 25-40 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> </ul>									
5)🖂	5) Claim(s) <u>25-40</u> is/are allowed.									
6)⊠ Claim(s) <u>1-4,15 and 16</u> is/are rejected.  7)⊠ Claim(s) <u>17</u> is/are objected to.										
								8)	Claim(s) are subject to restriction	and/or election re
Applicat	ion Papers		·							
9) 🗌	The specification is objected to by the Ex	xaminer.		•						
10)⊠	10)⊠ The drawing(s) filed on <u>02 June 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.									
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority (	under 35 U.S.C. § 119									
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>										
Attachment(s)										
	ce of References Cited (PTO-892)		4) Interview Summary							
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO-1449 or PTC er No(s)/Mail Date	•	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		O-152)					

Art Unit: 2644

### **DETAILED ACTION**

### Response to Arguments

Applicant's arguments, filed 20 May 2005 with respect to the rejection(s) of claim(s) 1, 2, 5, 15,16 and 17 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Davis (U.S. Patent 4,757,540).

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 appears to read to have either one or multiple difference circuit. From line 31 of page 2 of the claim, it appears as though a single differencing circuit is connected to the multiple channel signals. However, in line 5 of page 3 it appears as though there are multiple difference circuits. Clarification is requested. For the purpose of expediting examination it will be understood that one difference circuit exists that generates an overall difference value.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (U.S. Patent 4,757,540).

Regarding Claim 1, Davis discloses:

An apparatus that alters the total running time of an original program signal (title and abstract);

a program signal that is subdividable into a sequence of program signal portions (i.e. a portion of the audio signal is located in a correlation window; col. 3 lines 50 – 60 and Fig. 2b elements 26 and 28);

each program signal portion being subdividable into a sequence of signal windows (i.e. the audio signal is converted into a sequence of samples, the correlation window being a selection of these samples; fig. 3 element 34);

the apparatus comprising:

differencing circuitry that determines, for each program signal portion a difference value indicative of a difference between a characteristic of an initial signal window in said program signal portion and a subsequent signal window in said program signal portion such that the difference value meets a predefined criterion (i.e. the device

determines a second acceptable splice point via a correlation window and comparing it to the first splice point window; Fig. 3);

removal circuitry that deletes from the original program signal a multi-window segment of said program signal portion, the deleted segment beginning with the initial signal window and ending with the subsequent signal window (i.e. the correlation windows are set and the program portion between them is removed; see figs 2a – 2d and the related text within the disclosure).

Davis does not disclose the program signal as a multi-channel program signal. However, It would have been obvious at the time of the invention was made to one of ordinary skill in the art to apply Davis teaching to a multi channel program signal to be able to apply Davis' teachings to all types of program signals. One would have been motivated to do so since it has been held that Duplicating a part for multiple effects is an obvious variation. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1, Davis further discloses;

Threshold checking circuitry that determines whether the difference value associated with a program signal portion meets a threshold value, the removal circuitry being enabled to delete the multi-window segment if the difference value meets the threshold value (i.e. the correlation determination portion compares correlations with previous best correlations to determine an acceptable splice point, and when one is

Application/Control Number: 09/516,303

Art Unit: 2644

found the splice point is made and the samples are removed; Fig. 3 and its corresponding text in the disclosure).

Regarding **Claim 3**, in addition to the elements stated above regarding the USC 112 rejections, Davis discloses an apparatus that alters the total running time of an original program signal (title and abstract);

a channel signal being subdividable into a sequence of program signal portions (i.e. a portion of the audio signal is located in a correlation window; col. 3 lines 50 – 60 and Fig. 2b elements 26 and 28);

each channel signal portions being subdividable into a sequence of signal windows (i.e. the audio signal is converted into a sequence of samples, the correlation window being a selection of these samples; fig. 3 element 34);

the apparatus comprising:

for the channel signal, a difference circuit that receives said individual channel signal and determines, for each channel signal portion of said individual channel signal, a difference value indicative of a difference between a characteristic of an initial channel signal window in said channel signal portion and a characteristic of a subsequent channel signal window in said channel signal (i.e. the device determines a second acceptable splice point via a correlation window and comparing it to the first splice point window; Fig. 3);

a difference value combining circuit that receives the difference values from each of the differencing circuits and combines said difference values to generate an overall

difference value for a corresponding program signal portion of the program signal (i.e. the device calculates a difference in magnitude and takes the absolute value then sums the differences; fig. 4)

a removal circuit that deletes from the original program signal a multi-window segment that begins with the initial channel signal window and ends with the subsequent channel signal window (i.e. the correlation windows are set and the program portion between them is removed; see figs 2a - 2d and the related text within the disclosure).

Davis does not disclose the program signal as a multi-channel program signal. However, It would have been obvious at the time of the invention was made to one of ordinary skill in the art to apply Davis teaching to a multi channel program signal to be able to apply Davis' teachings to all types of program signals. One would have been motivated to do so since it has been held that Duplicating a part for multiple effects is an obvious variation. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 4, in addition to the elements stated above regarding claim 3 Davis further discloses:

threshold checking circuitry that determines whether the overall difference value meets a threshold value, the removal circuit being enabled to delete the multi-window segment if the difference value meets the threshold value (i.e. the correlation determination portion compares correlations with previous best correlations to

determine an acceptable splice point, and when one is found the splice point is made and the samples are removed; Fig. 3 and its corresponding text in the disclosure).

Regarding Claim 15, Davis discloses:

An method of altering the total running time of an original program signal (title and abstract);

a program signal that is subdividable into a sequence of program signal portions (i.e. a portion of the audio signal is located in a correlation window; col. 3 lines 50 – 60 and Fig. 2b elements 26 and 28);

each program signal portion being subdividable into a sequence of signal windows (i.e. the audio signal is converted into a sequence of samples, the correlation window being a selection of these samples; fig. 3 element 34);

the apparatus comprising:

determining, for each program signal portion a difference value indicative of a difference between a characteristic of an initial signal window in said program signal portion and a subsequent signal window in said program signal portion such that the difference value meets a predefined criterion and determine whether the difference value associated with a program signal portion meets a predefined threshold (i.e. the device determines a second acceptable splice point via a correlation window and comparing it to the first splice point window; Fig. 3);

in the event that the difference value associated with the program signal portion meets the predefined threshold, deleting from the original program signal a multi-

window segment of said program signal portion that begins with the initial signal window and ends with the subsequent signal window (i.e. the correlation windows are set and the program portion between them is removed; see figs 2a - 2d and the related text within the disclosure).

Davis does not disclose the program signal as a multi-channel program signal. However, It would have been obvious at the time of the invention was made to one of ordinary skill in the art to apply Davis teaching to a multi channel program signal to be able to apply Davis' teachings to all types of program signals. One would have been motivated to do so since it has been held that Duplicating a part for multiple effects is an obvious variation. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (U.S. Patent 4,757,540) in view of Kondo (U.S. Patent 5,627,581)

Regarding Claim 16, Davis discloses:

a method that of altering the total running time of an original program signal (title and abstract);

a channel signal being subdividable into a sequence of program signal portions (i.e. a portion of the audio signal is located in a correlation window; col. 3 lines 50 – 60 and Fig. 2b elements 26 and 28);

Application/Control Number: 09/516,303

Art Unit: 2644

each channel signal portions being subdividable into a sequence of signal windows (i.e. the audio signal is converted into a sequence of samples, the correlation window being a selection of these samples; fig. 3 element 34);

the apparatus comprising:

for the channel signal, , determining, for each channel signal portion of said individual channel signal, a difference value indicative of a difference between a characteristic of an initial channel signal window in said channel signal portion and a characteristic of a subsequent channel signal window in said channel signal portion such that the difference value meets a particular criterion and determining whether the difference value meets a predefined threshold (i.e. the device determines a second acceptable splice point via a correlation window and comparing it to the first splice point window; Fig. 3);

a removal circuit that deletes from the original program signal a multi-window segment that begins with the initial channel signal window and ends with the subsequent channel signal window (i.e. the correlation windows are set and the program portion between them is removed; see figs 2a – 2d and the related text within the disclosure).

in the event that the difference value meets the predefined threshold, deleting from the original program signal a multi-window segment that begins with the initial channel signal window and end with the subsequent channel signal window. (i.e. the correlation windows are set and the program portion between them is removed; see figs 2a – 2d and the related text within the disclosure).

Davis does not disclose the program signal as a multi-channel program signal. However, It would have been obvious at the time of the invention was made to one of ordinary skill in the art to apply Davis teaching to a multi channel program signal to be able to apply Davis' teachings to all types of program signals. One would have been motivated to do so since it has been held that Duplicating a part for multiple effects is an obvious variation. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Furthermore the modified device disclosed by Davis does not determine a difference fore ach of the program signal channels or combining the difference value from the individual signal channels to generate an overall difference value for a corresponding program signal portion of the multi-channel program signal and removing content based on the overall value.

#### Kondo discloses:

combining the difference value from the individual signal channels to generate an overall difference value for a corresponding program signal portion of the multi-channel program signal (i.e. the sum total of difference values calculated at the calculating circuit sent to a comparing circuit; col. 20 lines 3 and 4).

One of ordinary skill in the art at the time of the invention would have been motivated to use Kondo's difference summing on the modified Davis invention in order to facilitate the removal of unnecessary program content in multi channel signals. It would be desirable to remove unnecessary program content in order to shorten the duration of the program and allow other material to be inserted such as advertising for all forms of audio signals. One would have been further motivated to do so since it has

Art Unit: 2644

been held that Duplicating a part for multiple effects is an obvious variation. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

## Allowable Subject Matter

Claim 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 25 – 40 are allowed for reasons set forth in the previous action.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Moeller (U.S. 5,995,153).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/516,303

Art Unit: 2644

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SINH TRAN SUPERVISORY PATENT EXAMINER

acf